



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,329	01/22/2002	David G. Wright	0325.00529	4794
21363	7590	06/29/2005	EXAMINER	
CHRISTOPHER P. MAIORANA, P.C.			PAN, YUWEN	
24840 HARPER			ART UNIT	
ST. CLAIR SHORES, MI 48080			PAPER NUMBER	

2682

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/054,329

Applicant(s)

WRIGHT ET AL.

Examiner

Yuwen Pan

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments, see applicant's remark, filed 4/18/05, with respect to the rejection(s) of claim(s) 1 under 35 U.S.C. 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Okamura (US2001/0021659).

DETAILED ACTION

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3, 6-8, 10-12, 14-16, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamdi et al (US006408351B1) in view of Okamura (US2001/0021659).

Per claims 1, 14 and 15, Hamdi teaches that an apparatus (see figure 1) comprising: a transceiver circuit (item 114) comprising a plurality of bus input/outputs (I/Os), wherein said transceiver circuit is configured to directly couple a plurality of first digital signals to said bus I/Os when said bus I/Os are in one state (see column 11 and line 42-column 12 and line 7).

Hamdi doesn't teach an analog signal to said bus I/Os when said bus I/Os are in another state with a multiplexer circuit. Okamura teaches an analog signal to said bus I/Os when said bus I/Os are in another state with a multiplexer circuit (see abstract, figure 1 and 3, elements 4, 33, 35, 42, and 47, para. 23-34).

Art Unit: 2682

It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Okamura with Hamdi's device such that the analog and digital integrated connector would reduce the size of the portable device.

Per claims 2 and 16, Hamdi further teaches that said transceiver circuit is further configured to directly couple a plurality of second digital signals to said bus I/Os when said bus I/Os are in a third state (see figure 1 and item 109).

Per claim 3, Hamdi further teaches that said apparatus further comprises a second circuit coupled to said transceiver circuit and configured to present/receive said first and second digital signals (see figure 1 and items 108).

Per claim 6, Hamdi further teaches that said transceiver circuit is configured to determine said state of said bus I/Os (see column 14 and lines 25-46).

Per claim 7, Hamdi further teaches that said second circuit is configured to determine said state of said bus I/Os (see column 13 and lines 31-40).

Per claim 8, it is inherent that said second digital signals are signals selected from a group consisting Inter-IC protocol and Serial Peripheral Interface protocol signals since Hamdi teaches that microprocessor CPUs (see figure 1).

Art Unit: 2682

Per claim 10, Hamdi further teaches said transceiver circuit comprises an interface circuit configured to control said coupling in response to said first, second, and third states (see figure 1 and 2, item 118, column 12 and lines 19-37).

Per claim 11, Hamdi further teaches that said first digital signal comprise signals compliant to a USB protocol (see column 13 and lines 10).

Per claim 12, Hamdi further teaches that said apparatus is configured to communicate said first, second and third states between said transceiver circuit and said second circuit via one or more of said plurality of second digital signals (see figure 1)..

Per claim 21, Okamura further teaches said interface circuit generates a control signal to configure said multiplexer circuit to couple said analog signal to said bus and couple said plurality of first digital signals to said bus I/Os (see figure 3, para. 27-34).

2. Claims 5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamdi et al (US006408351B1) and Okamura (US2001/0021659) in view of online publication (USB OTG).

Hamdi discloses an analogous art as recited in claim 1. Hamdi doesn't teach that said bus I/Os and said first digital signals are compliant with a USB OTG protocol. Online publication teaches that a new supplement to USB 2.0 specification has been finalized in December 2001, called USB OTG. It would have been obvious to one ordinary skill in the art at the time the invention

Art Unit: 2682

was made to combine the teaching of USB OTG with Hamdi's device such that it connects dual-role device without having individual driver for each device on the Peripheral list.

3. Claims 4, 13, 17, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamdi et al (US006408351B1) and Okamura (US2001/0021659) in further view of applicant admitted prior art (hereinafter, AAPA).

Hamdi discloses an analogous art ask recited in claims 1-3. Hamdi further teaches that the analog signal comprises an audio signal (see column 13 and lines 16-30). Hamdi doesn't teach that said transceiver circuit comprises a cellular telephone transceiver circuit; said second circuit comprises a cellular telephone application specific integrated circuit (ASIC); and said bus I/Os comprise a cellular telephone interconnect. AAPA teaches that said transceiver circuit comprises a cellular telephone transceiver circuit; said second circuit comprises a cellular telephone application specific integrated circuit (ASIC); and said bus I/Os comprise a cellular telephone interconnect (see specification, page 2 and 3). It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of AAPA with Hamdi's device such that the users increase their mobility with these portable computer device.


Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuwen Pan whose telephone number is 571-272-7855. The examiner can normally be reached on 8-5 M-F.

Art Unit: 2682

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on 571-272-7876. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Xuwen Pan
June 25, 2005


NICK CORSARO
PRIMARY EXAMINER